

*Ma  
Fran*

CRF Errors Corrected by the STIC Systems Branch

1642

Serial Number: 09/462,625

**ENTERED**

CRF Processing Date:

Edited by:

Verified by:

5/25/2001

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:

Other:

Seq. 2 - added 12207

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/09/462,625**

DATE: 05/25/2001  
 TIME: 14:38:22

Input Set : A:\Pto.amc  
 Output Set: C:\CRF3\05252001\I462625.raw

4 <110> APPLICANT: Georgiev, Georgii  
 5 Kiselev, Sergei  
 6 Prokhorchouk, Egor  
 7 Ostermann, Elinborg  
 9 <120> TITLE OF INVENTION: Tumor Growth Inhibition- and Apoptosis-Associated Genes  
 10 and Polypeptides and Methods of Use Thereof  
 12 <130> FILE REFERENCE: 0652.1630001  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/462,625  
 C--> 15 <141> CURRENT FILING DATE: 2000-07-28  
 17 <150> PRIOR APPLICATION NUMBER: US 08/893,764  
 18 <151> PRIOR FILING DATE: 1997-07-11  
 20 <150> PRIOR APPLICATION NUMBER: PCT/EP98/04287  
 21 <151> PRIOR FILING DATE: 1998-07-10  
 23 <160> NUMBER OF SEQ ID NOS: 24  
 25 <170> SOFTWARE: PatentIn Ver. 2.1  
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 28 <211> LENGTH: 549  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Artificial Sequence  
 32 <220> FEATURE:  
 33 <221> NAME/KEY: CDS  
 34 <222> LOCATION: (1)..(549)  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA  
 39 <400> SEQUENCE: 1  
 40 atg ttg ttt gcc tgt gct ctc ctt gcc ctc ctg ggt ctg gca acc tcc 48  
 41 Met Leu Phe Ala Cys Ala Leu Leu Ala Leu Leu Gly Leu Ala Thr Ser  
 42 1 5 10 15  
 44 tgc agt ttc atc gtg ccc cgc agt gag tgg agg gcc ctg cca tcc gag 96  
 45 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu  
 46 20 25 30  
 48 tgc tct agc cgc ctg ggg cac cca gtt cgc tac gtg gtg atc tca cac 144  
 49 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His  
 50 35 40 45  
 52 aca gcc ggc agc ttc tgc aac agc ccg gac tcc tgt gaa cag cag gcc 192  
 53 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala  
 54 50 55 60  
 56 cgc aat gtg cag cat tac cac aag aat gag ctg ggc tgg tgc gat gta 240  
 57 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val  
 58 65 70 75 80  
 60 gcc tac aac ttc ctt att gga gag gac ggt cat gtc tat gaa ggc cga 288  
 61 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg  
 62 85 90 95  
 64 ggc tgg aac atc aag ggt gac cac aca ggg ccc atc tgg aat ccc atg 336  
 65 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met  
 66 100 105 110  
 68 tct att ggc atc acc ttc atg ggg aac ttc atg gac cgg gta ccc gca 384

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 14:38:22

Input Set : A:\Pto.amc  
Output Set: C:\CRF3\05252001\I462625.raw

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70      115          120          125
72 aag cgg gcc ctc cgt gct gcc cta aat ctt ctg gaa tgt ggg gtg tct  432
73 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
74      130          135          140
76 cgg ggc ttc ctg aga tcc aac tat gaa gtc aaa gga cac cgg gat gtg  480
77 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
78 145          150          155          160
80 caa agc act ctc tct cca ggt gac caa ctc tat cag gtc atc caa agc  528
81 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
82      165          170          175
84 tgg gaa cac tac cga gag tga
85 Trp Glu His Tyr Arg Glu
86      180
89 <210> SEQ ID NO: 2
90 <211> LENGTH: 182
91 <212> TYPE: PRT
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA
97 <400> SEQUENCE: 2
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99   1          5          10          15
100 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu
101    20         25          30
102 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His
103    35         40          45
104 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala
105    50         55          60
106 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val
107   65         70          75          80
108 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg
109    85         90          95
110 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met
111    100        105         110
112 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala
113    115        120         125
114 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser
115    130        135         140
116 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val
117   145         150         155          160
118 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser
119    165        170         175
120 Trp Glu His Tyr Arg Glu
121    180
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 718
127 <212> TYPE: DNA
128 <213> ORGANISM: Homo sapiens

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 14:38:22

Input Set : A:\Pto.amc  
Output Set: C:\CRF3\05252001\I462625.raw

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130 <220> FEATURE:
131 <221> NAME/KEY: 5'UTR
132 <222> LOCATION: (1)..(67)
134 <220> FEATURE:
135 <221> NAME/KEY: CDS
136 <222> LOCATION: (68)..(643)
138 <220> FEATURE:
139 <221> NAME/KEY: 3'UTR
140 <222> LOCATION: (644)..(718)
142 <220> FEATURE:
143 <221> NAME/KEY: polyA_site
144 <222> LOCATION: (712)..(714)
146 <400> SEQUENCE: 3
147 ctgagttact gggcccaagag gctggggcccc tggacatgta cctgcagcca ctatgtcccg 60
149 ccgctct atg ctg ctt gcc tgg gct ctc ccc agc ctc ctt cga ctc gga 109
150 Met Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly
151 1 5 10
153 gct cag gag aca gaa gac ccg gcc tgc tgc agc ccc ata gtg ccc 157
154 Ala Ala Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro
155 15 20 25 30
157 cgg aac gag tgg aag gcc ctg gca tca gag tgc gcc cag cac ctg agc 205
158 Arg Asn Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser
159 35 40 45
161 ctg ccc tta cgc tat gtg gtg gta tcg cac acg gcg ggc agc agc tgc 253
162 Leu Pro Leu Arg Tyr Val Val Ser His Thr Ala Gly Ser Ser Cys
163 50 55 60
165 aac acc ccc gcc tcg tgc cag cag gcc cgg aat gtg cag cac tac 301
166 Asn Thr Pro Ala Ser Cys Gln Gln Ala Arg Asn Val Gln His Tyr
167 65 70 75
169 cac atg aag aca ctg ggc tgg tgc gac gtg ggc tac aac ttc ctg att 349
170 His Met Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile
171 80 85 90
173 gga gaa gac ggg ctc gta tac gag ggc cgt ggc tgg aac ttc acg ggt 397
174 Gly Glu Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly
175 95 100 105 110
177 gcc cac tca ggt cac tta tgg aac ccc atg tcc att ggc atc agc ttc 445
178 Ala His Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe
179 115 120 125
181 atg ggc aac tac atg gat cgg gtg ccc aca ccc cag gcc atc cgg gca 493
182 Met Gly Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala
183 130 135 140
185 gcc cag ggt cta ctg gcc tgc ggt gtg gct cag gga gcc ctg agg tcc 541
186 Ala Gln Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser
187 145 150 155
189 aac tat gtg ctc aaa gga cac cgg gat gtg cag cgt aca ctc tct cca 589
190 Asn Tyr Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro
191 160 165 170
193 ggc aac cag ctc tac cac ctc atc cag aat tgg cca cac tac cgc tcc 637
194 Gly Asn Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser

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PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 14:38:22

Input Set : A:\Pto.amc  
Output Set: C:\CRF3\05252001\I462625.raw

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195 175           180           185           190
197 ccc tga ggccctgctg atccgcaccc cattcctccc ctccccatggc caaaaacccc      693
198 Pro
200 actgtctcct ttcataaa agatg
203 <210> SEQ ID NO: 4
204 <211> LENGTH: 191
205 <212> TYPE: PRT
206 <213> ORGANISM: Homo sapiens
208 <400> SEQUENCE: 4
209 Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly Ala Ala
210   1           5           10           15
211 Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro Arg Asn
212   20          25          30
213 Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser Leu Pro
214   35          40          45
215 Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys Asn Thr
216   50          55          60
217 Pro Ala Ser Cys Gln Gln Ala Arg Asn Val Gln His Tyr His Met
218   65          70          75          80
219 Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile Gly Glu
220   85          90          95
221 Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly Ala His
222   100         105         110
223 Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe Met Gly
224   115         120         125
225 Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala Ala Gln
226   130         135         140
227 Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser Asn Tyr
228   145         150         155         160
229 Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro Gly Asn
230   165         170         175
231 Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser Pro
232   180         185         190
236 <210> SEQ ID NO: 5
237 <211> LENGTH: 14
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
244 <400> SEQUENCE: 5
245 ttttttttt ttac
248 <210> SEQ ID NO: 6
249 <211> LENGTH: 10
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
256 <400> SEQUENCE: 6
257 aatcgggctg

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 14:38:22

Input Set : A:\Pto.amc  
Output Set: C:\CRF3\05252001\I462625.raw

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260 <210> SEQ ID NO: 7
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262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
268 <400> SEQUENCE: 7
269 agtcagccac 10
272 <210> SEQ ID NO: 8
273 <211> LENGTH: 18
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
280 <400> SEQUENCE: 8
281 gaaaggccct cgtgatac 18
284 <210> SEQ ID NO: 9
285 <211> LENGTH: 36
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
292 <400> SEQUENCE: 9
293 cagggccctc cactcacttg cataggcatt tgttagc 36
296 <210> SEQ ID NO: 10
297 <211> LENGTH: 36
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
304 <400> SEQUENCE: 10
305 gctacaaaatg cctatgcaag tgagtggagg gccctg 36
308 <210> SEQ ID NO: 11
309 <211> LENGTH: 41
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
316 <400> SEQUENCE: 11
317 ggccgctagc ctgcagttat cactctcggt agtgttccca g 41
320 <210> SEQ ID NO: 12
321 <211> LENGTH: 30
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer
328 <400> SEQUENCE: 12
329 ggccgatccg agtggagggc cctgccatcc 30
332 <210> SEQ ID NO: 13

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VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 14:38:23

Input Set : A:\Pto.amc  
Output Set: C:\CRF3\05252001\I462625.raw

L:14 M:270 C: Current Application Number differs, Replaced Application Number  
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Georgiev, Georgii  
 5 Kiselev, Sergei  
 6 Prokhorchouk, Egor  
 7 Ostermann, Elinborg  
 9 <120> TITLE OF INVENTION: Tumor Growth Inhibition- and Apoptosis-Associated Genes  
 10 and Polypeptides and Methods of Use Thereof  
 12 <130> FILE REFERENCE: 0652.1630001  
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/462,625  
 C--> 15 <141> CURRENT FILING DATE: 2000-07-28  
 17 <150> PRIOR APPLICATION NUMBER: US 08/893,764  
 18 <151> PRIOR FILING DATE: 1997-07-11  
 20 <150> PRIOR APPLICATION NUMBER: PCT/EP98/04287  
 21 <151> PRIOR FILING DATE: 1998-07-10  
 23 <160> NUMBER OF SEQ ID NOS: 24  
 25 <170> SOFTWARE: PatentIn Ver. 2.1  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 549  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Artificial Sequence  
 32 <220> FEATURE:  
 33 <221> NAME/KEY: CDS  
 34 <222> LOCATION: (1)..(549)  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA  
 39 <400> SEQUENCE: 1  
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 41 Met Leu Phe Ala Cys Ala Leu Leu Ala Leu Leu Gly Leu Ala Thr Ser  
 42 1 5 10 15  
 44 tgc agt ttc atc gtg ccc cgc agt gag tgg agg gcc ctg cca tcc gag 96  
 45 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu  
 46 20 25 30  
 48 tgc tct agc cgc ctg ggg cac cca gtt cgc tac gtg gtg atc tca cac 144  
 49 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His  
 50 35 40 45  
 52 aca gcc ggc agc ttc tgc aac agc ccg gac tcc tgt gaa cag cag gcc 192  
 53 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala  
 54 50 55 60  
 56 cgc aat gtg cag cat tac cac aag aat gag ctg ggc tgg tgc gat gta 240  
 57 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val  
 58 65 70 75 80  
 60 gcc tac aac ttc ctt att gga gag gac ggt cat gtc tat gaa ggc cga 288  
 61 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg  
 62 85 90 95  
 64 ggc tgg aac atc aag ggt gac cac aca ggg ccc atc tgg aat ccc atg 336  
 65 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met  
 66 100 105 110  
 68 tct att ggc atc acc ttc atg ggg aac ttc atg gac cgg gta ccc gca 384

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

69 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala  
70 115 120 125  
72 aag cgg gcc ctc cgt gct gcc cta aat ctt ctg gaa tgt ggg gtg tct 432  
73 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser  
74 130 135 140  
76 cgg ggc ttc ctg aga tcc aac tat gaa gtc aaa gga cac cgg gat gtg 480  
77 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val  
78 145 150 155 160  
80 caa agc act ctc tct cca ggt gac caa ctc tat cag gtc atc caa agc 528  
81 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser  
82 165 170 175  
84 tgg gaa cac tac cga gag tga 549  
85 Trp Glu His Tyr Arg Glu  
86 180  
89 <210> SEQ ID NO: 2  
90 <211> LENGTH: 182  
91 <212> TYPE: PRT  
92 <213> ORGANISM: Artificial Sequence  
W--> 93 <220> FEATURE: *<add number identifier*  
93 <223> OTHER INFORMATION: Description of Artificial Sequence: tag7 cDNA  
95 <400> SEQUENCE: 2  
96 Met Leu Phe Ala Cys Ala Leu Leu Ala Leu Leu Gly Leu Ala Thr Ser  
97 1 5 10 15  
98 Cys Ser Phe Ile Val Pro Arg Ser Glu Trp Arg Ala Leu Pro Ser Glu  
99 20 25 30  
100 Cys Ser Ser Arg Leu Gly His Pro Val Arg Tyr Val Val Ile Ser His  
101 35 40 45  
102 Thr Ala Gly Ser Phe Cys Asn Ser Pro Asp Ser Cys Glu Gln Gln Ala  
103 50 55 60  
104 Arg Asn Val Gln His Tyr His Lys Asn Glu Leu Gly Trp Cys Asp Val  
105 65 70 75 80  
106 Ala Tyr Asn Phe Leu Ile Gly Glu Asp Gly His Val Tyr Glu Gly Arg  
107 85 90 95  
108 Gly Trp Asn Ile Lys Gly Asp His Thr Gly Pro Ile Trp Asn Pro Met  
109 100 105 110  
110 Ser Ile Gly Ile Thr Phe Met Gly Asn Phe Met Asp Arg Val Pro Ala  
111 115 120 125  
112 Lys Arg Ala Leu Arg Ala Ala Leu Asn Leu Leu Glu Cys Gly Val Ser  
113 130 135 140  
114 Arg Gly Phe Leu Arg Ser Asn Tyr Glu Val Lys Gly His Arg Asp Val  
115 145 150 155 160  
116 Gln Ser Thr Leu Ser Pro Gly Asp Gln Leu Tyr Gln Val Ile Gln Ser  
117 165 170 175  
118 Trp Glu His Tyr Arg Glu  
119 180  
123 <210> SEQ ID NO: 3  
124 <211> LENGTH: 718  
125 <212> TYPE: DNA  
126 <213> ORGANISM: Homo sapiens

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

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128 <220> FEATURE:
129 <221> NAME/KEY: 5'UTR
130 <222> LOCATION: (1)..(67)
132 <220> FEATURE:
133 <221> NAME/KEY: CDS
134 <222> LOCATION: (68)..(643)
136 <220> FEATURE:
137 <221> NAME/KEY: 3'UTR
138 <222> LOCATION: (644)..(718)
140 <220> FEATURE:
141 <221> NAME/KEY: polyA_site
142 <222> LOCATION: (712)..(714)
144 <400> SEQUENCE: 3
145 ctgagttact gggcccaagag gctggggcccc tggacatgtta cctgcagcca ctatgtcccg 60
147 ccgctct atg ctg ctt gcc tgg gct ctc ccc agc ctc ctt cga ctc gga 109
148 Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly
149 1 5 10
151 gcg gct cag gag aca gaa gac ccg gcc tgc tgc agc ccc ata gtg ccc 157
152 Ala Ala Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro
153 15 20 25 30
155 cgg aac gag tgg aag gcc ctg gca tca gag tgc gcc cag cac ctg agc 205
156 Arg Asn Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser
157 35 40 45
159 ctg ccc tta cgc tat gtg gtg gta tcg cac acg gcg ggc agc agc tgc 253
160 Leu Pro Leu Arg Tyr Val Val Ser His Thr Ala Gly Ser Ser Cys
161 50 55 60
163 aac acc ccc gcc tcg tgc cag cag cag gcc cgg aat gtg cag cac tac 301
164 Asn Thr Pro Ala Ser Cys Gln Gln Ala Arg Asn Val Gln His Tyr
165 65 70 75
167 cac atg aag aca ctg ggc tgg tgc gac gtg ggc tac aac ttc ctg att 349
168 His Met Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile
169 80 85 90
171 gga gaa gac ggg ctc gta tac gag ggc cgt ggc tgg aac ttc acg ggt 397
172 Gly Glu Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly
173 95 100 105 110
175 gcc cac tca ggt cac tta tgg aac ccc atg tcc att ggc atc agc ttc 445
176 Ala His Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe
177 115 120 125
179 atg ggc aac tac atg gat cgg gtg ccc aca ccc cag gcc atc cgg gca 493
180 Met Gly Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala
181 130 135 140
183 gcc cag ggt cta ctg gcc tgc ggt gtg gct cag gga gcc ctg agg tcc 541
184 Ala Gln Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser
185 145 150 155
187 aac tat gtg ctc aaa gga cac cgg gat gtg cag cgt aca ctc tct cca 589
188 Asn Tyr Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro
189 160 165 170
191 ggc aac cag ctc tac cac ctc atc cag aat tgg cca cac tac cgc tcc 637
192 Gly Asn Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

193	175	180	185	190	
195	ccc tga ggccctgctg atccgcaccc cattcctccc ctccccatggc caaaaacccc				693
196	Pro				
198	actgtctcct tctccaataa agatg				718
201	<210> SEQ ID NO: 4				
202	<211> LENGTH: 191				
203	<212> TYPE: PRT				
204	<213> ORGANISM: Homo sapiens				
206	<400> SEQUENCE: 4				
207	Met Leu Leu Ala Trp Ala Leu Pro Ser Leu Leu Arg Leu Gly Ala Ala				
208	1 5 10 15				
209	Gln Glu Thr Glu Asp Pro Ala Cys Cys Ser Pro Ile Val Pro Arg Asn				
210	20 25 30				
211	Glu Trp Lys Ala Leu Ala Ser Glu Cys Ala Gln His Leu Ser Leu Pro				
212	35 40 45				
213	Leu Arg Tyr Val Val Val Ser His Thr Ala Gly Ser Ser Cys Asn Thr				
214	50 55 60				
215	Pro Ala Ser Cys Gln Gln Ala Arg Asn Val Gln His Tyr His Met				
216	65 70 75 80				
217	Lys Thr Leu Gly Trp Cys Asp Val Gly Tyr Asn Phe Leu Ile Gly Glu				
218	85 90 95				
219	Asp Gly Leu Val Tyr Glu Gly Arg Gly Trp Asn Phe Thr Gly Ala His				
220	100 105 110				
221	Ser Gly His Leu Trp Asn Pro Met Ser Ile Gly Ile Ser Phe Met Gly				
222	115 120 125				
223	Asn Tyr Met Asp Arg Val Pro Thr Pro Gln Ala Ile Arg Ala Ala Gln				
224	130 135 140				
225	Gly Leu Leu Ala Cys Gly Val Ala Gln Gly Ala Leu Arg Ser Asn Tyr				
226	145 150 155 160				
227	Val Leu Lys Gly His Arg Asp Val Gln Arg Thr Leu Ser Pro Gly Asn				
228	165 170 175				
229	Gln Leu Tyr His Leu Ile Gln Asn Trp Pro His Tyr Arg Ser Pro				
230	180 185 190				
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235	<211> LENGTH: 14				
236	<212> TYPE: DNA				
237	<213> ORGANISM: Artificial Sequence				
239	<220> FEATURE:				
240	<223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer				
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243	ttttttttt ttac			14	
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247	<211> LENGTH: 10				
248	<212> TYPE: DNA				
249	<213> ORGANISM: Artificial Sequence				
251	<220> FEATURE:				
252	<223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer				
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255	aatcgggctg			10	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001  
TIME: 13:39:32

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

258 <210> SEQ ID NO: 7  
259 <211> LENGTH: 10  
260 <212> TYPE: DNA  
261 <213> ORGANISM: Artificial Sequence  
263 <220> FEATURE:  
264 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
266 <400> SEQUENCE: 7  
267 agtcagccac 10  
270 <210> SEQ ID NO: 8  
271 <211> LENGTH: 18  
272 <212> TYPE: DNA  
273 <213> ORGANISM: Artificial Sequence  
275 <220> FEATURE:  
276 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
278 <400> SEQUENCE: 8  
279 gaaagggcct cgtgatac 18  
282 <210> SEQ ID NO: 9  
283 <211> LENGTH: 36  
284 <212> TYPE: DNA  
285 <213> ORGANISM: Artificial Sequence  
287 <220> FEATURE:  
288 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
290 <400> SEQUENCE: 9  
291 cagggccctc cactcaattt cataggcatt tgttagc 36  
294 <210> SEQ ID NO: 10  
295 <211> LENGTH: 36  
296 <212> TYPE: DNA  
297 <213> ORGANISM: Artificial Sequence  
299 <220> FEATURE:  
300 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
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303 gctacaaatg cctatgcaag tgagtggagg gccctg 36  
306 <210> SEQ ID NO: 11  
307 <211> LENGTH: 41  
308 <212> TYPE: DNA  
309 <213> ORGANISM: Artificial Sequence  
311 <220> FEATURE:  
312 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
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318 <210> SEQ ID NO: 12  
319 <211> LENGTH: 30  
320 <212> TYPE: DNA  
321 <213> ORGANISM: Artificial Sequence  
323 <220> FEATURE:  
324 <223> OTHER INFORMATION: Description of Artificial Sequence: DNA Primer  
326 <400> SEQUENCE: 12  
327 ggccgatccg agtggaggc cctgccatcc 30  
330 <210> SEQ ID NO: 13

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/462,625

DATE: 05/25/2001

TIME: 13:39:33

Input Set : A:\seqlist- 0652 1630001.txt  
Output Set: C:\CRF3\05252001\I462625.raw

L:14 M:270 C: Current Application Number differs, Replaced Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:93 M:258 W: Mandatory Feature missing, <220> FEATURE: